

Remarks/Arguments:

Claims 81, 85, 86 and 90 have been rejected under 35 U.S.C. § 103(a). Claim 90 (as previously examined) has been incorporated into claim 81. It is respectfully submitted that claim 81 is patentable over the art of record for the reasons set forth below.

With respect to the feature of former claim 90 (which is now in claim 81), the Official Action asserts that the disclosure in Matsuura "... so that the output of the laser diode 30 is made constant" (please see, e.g., column 13, lines 24-25 of Matsuura) is referring to the *wavelength* being made constant (emphasis added).

The Official Action further asserts that "the claim recites the semiconductor laser is wavelength-locked and that means the semiconductor laser has a constant wavelength" (please see, e.g., page 4, 4th paragraph of the present Office Action).

Applicants respectfully disagree. The aforementioned cited portions are not referring to *wavelength* being made constant (emphasis added). Rather Matsuura is referring to the *output power* of the laser diode 30 being made constant (emphasis added).

Applicants' argument is supported by Matsuura at column 6, line 68 to column 7, line 5 of Matsuura, wherein it is disclosed that:

Therefore, in the optical system shown in FIG. 3, the output level of the laser diode 30 is monitored by the monitor photodiode 36 and the detected output of the photodiode 36 is fed back to the laser diode 30 in an APC fashion, thereby stabilizing the output power of the laser diode 30 (emphasis added).

In fact, Matsuura does not seem to teach or suggest wavelength-locking or making the wavelength constant. Matsuura neither teaches nor suggests the components required for wavelength-locking (e.g., grating or filter). Rather, for example, Applicants disclose using either a grating or a filter to perform wavelength-locking. This feature has been included in claim 90 and is supported by paragraph [214] of the publication corresponding to the present application.

In Applicants' exemplary embodiment, since the oscillation wavelength of the semiconductor laser is locked or adjusted to the phase-matched wavelength, and the phase-matched wavelength is preferably set to have an amount of wavelength shift of about 0.2 nm or less, wavelength-locking allows for constant wavelength outputs with variations or shifts of less than 1 nm (please see, e.g., Figures 10-11, and paragraphs [0154] and [0213]).

It is because Applicants' laser is wavelength locked that wavelength variations or shifts can be controlled to within 1 nm or less.

Byer does not make up for the deficiencies of Matsuura.

Therefore, since neither Matsuura nor Byer teach or suggest that the semiconductor laser is wavelength-locked (as discussed above), withdrawal of the rejection of claim 81 is respectfully requested.

The remaining claims are patentable by virtue of their dependency on an allowable independent claim.

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In view of the amendments and remarks set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,



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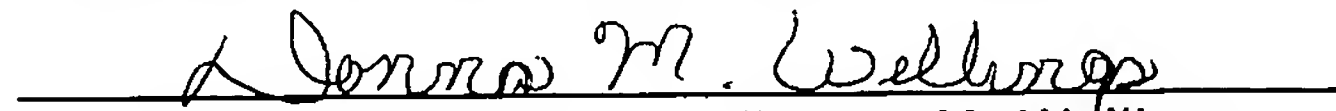
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The Director is hereby authorized to charge or credit Deposit Account No. **18-0350** for any additional fees, or any underpayment or credit for overpayment in connection herewith.

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